

Final Technical Progress Report for WWF Tarangire Project

Project No	623-A-00-98-00064-00
Project Title	WWF Tarangire National Park Project
Project life span	30 th September 1998 – October 31, 2003
Reporting Period	30 th September 1998 – October 31, 2003

1. Introduction

Tarangire National Park (TNP) is situated in northern Tanzania and covers an area of more than 2,600 square kilometers. It is home to one of the largest elephant populations in East Africa. The park is also rich in other mammals, many of which move out of the park during the rainy season. The Tarangire River flows through the entire park, and with its associated wetlands, provides a year round source of fresh water. TNP serves as a critical dry season (July – December) refuge for wildlife in the 20,000 square kilometer Maasai Steppes.

Though the park's importance is unquestioned, it has been faced with several constraints that have hindered the development of a comprehensive management strategy. TNP managers have come to understand that they urgently need reliable information concerning the natural resources base, patterns of human and wildlife utilization of the resources and the extent of pressures on the wetlands.

This project aimed to address the above constraints and to help TNP and TANAPA integrate existing and new information into the management decision making process. The main focus of this project however was conservation of the Tarangire River wetlands. Also included was capacity building in ecological monitoring, vegetation and participatory land use mapping, and large mammal surveys in the whole Tarangire ecosystem.

2. Objectives

The overall objective of this project was to sustainably conserve the Tarangire wetland system. The aim was to achieve this through increased capacity in ecological monitoring including establishment of a GIS center at TNP for the production of ecological information that will be integrated into park management decisions. Aim was also to establish a desk top publishing unit at TANAPA headquarters for the production of information materials like newsletters, brochures, guide books maps, and post cards on Tarangire and Lake Manyara NP.

This project aimed to achieve the following:

- Tarangire/Lake Manyara wetlands sustainably conserved;
- Increased knowledge of population dynamics of large mammals in the ecosystem;
- Migratory routes and dispersal areas of elephants and other large mammals in the Tarangire Ecosystem described and mapped;
- Vegetation and land use pattern of the Tarangire ecosystem mapped;
- GIS center established; relevant TANAPA staff trained and capable of gathering, storing, retrieving, analyzing and interpreting ecological data which in-turn could be used for enhancing the park's conservation and management;
- Capacity for desktop publishing at TANAPA headquarters established;
- Two postgraduate students trained; dissertations on Wildlife ecology and Land-use produced at MSc level; and
- Overall management of Tarangire National Park and its natural resources improved.

3. Progress

1. Sustainable conservation of Tarangire river and its associated wetlands

Selected local NGOs and Institutions carried out activities for this objective in collaboration with WWF. The selected local NGOs included Mazingira Bora Karatu, and Friends In Development (FIDE). The other local institutions were Monduli Development Council (MDC), Kondoa District Council, Karatu District Council, Mbulu District Council and TANAPA's Ecological Monitoring Department.

The following has been achieved over the five year period:

- ◆ Rehabilitation of eroded catchment slopes of Lake Babati (by FIDE) and of Lake Manyara (by Mbulu District Council and Mazingira Bora Karatu (MBK)) successfully completed. A total of 300,000 tree seedlings were transplanted on to the degraded areas on the slopes of Lakes Babati and Lake Manyara;
- ◆ The project supported successfully MBK, FIDE, Mbulu District Council, Karatu District Council and Kondoa District Councils to raised community awareness on the importance of environmental conservation and natural resources management by conducting meetings, seminars and workshops. As a result, the communities in selected villages formulated and adopted environmental and natural resources conservation bylaws;
- ◆ The project supported successfully TANAPA's Ecological Monitoring Unit to carry out

monitoring of water quality within the Tarangire/Lake Manyara catchment basin. Data was collected and analysed. A scientific report was produced and submitted to an international scientific Journal for publication;

◆ The project supported successfully Kondoa and Mbulu District Councils to promote *insitu* conservation by raising community awareness and demarcating selected areas for conservation.

2. Vegetation and Participatory land-use mapping

The following has been achieved under this project component:

- Preparation of participatory land use maps for selected villages of Monduli, Babati and Kondoa Districts:
- ♦ Kondoa District Council facilitated resolution of boundary conflict between neighbouring villages of Kiteto and Kondoa districts;
- Selected villages with participatory land use plans started making use of these in their day to day planning and implementation for socio-economic development activities.

3. Ecological Monitoring

The following has been achieved under this project component:

- Guidebooks on, reptiles & amphibians of Tarangire National Park produced;
- Guidebook on butterflies of Tarangire and Lake Manyara National Parks produced;
- ◆ An intensive training for three TANAPA staff on GIS was successfully completed. The trainees started producing user-friendly information that is being integrated in Park's management. The project supported the facilitation of the training by the Institute of Resource Assessment of the University of Dar es Salaam;
- ◆ The knowledge on population dynamics of large mammals in the ecosystem has been increased:
- Migratory routes and dispersal areas of elephants and other large mammals in the Tarangire ecosystem has been described and mapped;
- ♦ Vegetation and land use pattern of the Tarangire ecosystem was mapped;
- ◆ The GIS center was constructed and is operational; relevant TANAPA staff were trained in the use of GIS. The ecological monitoring staff of Tarangire National Park is now capable of gathering, storing, retrieving, analyzing and interpreting ecological data which in-turn will be used for enhancing the park's conservation and management efforts.

4. Establish and train Desktop publishing Unit at TANAPA headquarters

◆ Training of three selected TANAPA staff on Desk Top Publishing was successfully completed. The trainees acquired substantial skills and started producing leaflets for parks in Tanzania. As a result, TANAPA is planning a Desk Top Publishing Unit to be based in TANAPA headquarters by using the project's equipping and by purchasing additional equipment.

5. Capacity building of implementing partners

♦ Capacity building was provided to partner organisations within this project. TANAPA, Tarangire National Park, FIDE, MBK, Kondoa District Council and Mbulu District were

- provided with technical and material assistance which resulted in their improve effectiveness of environmental and natural resources management. The technical support was provided based on a capacity needs assessment;
- Grassroots communities in the catchment areas of Tarangire River, Lakes Manyara and Babati were trained on sustainable agricultural practices and natural resources management;
- ◆ Two staff members each from Mbulu District Council, MBK and FIDE attended a two week long training on Micro-Computer Applications, each of these partner organisations were provided with one desk-top computer and printer unit;
- ◆ Two staff members from Kondoa District Council and FIDE attended a two week long training on Integrated Conservation and Development Programs in Arusha. The institutional capacity building initiative followed the recommendation from the midterm evaluation of the project that was conducted last year;
- ◆ Two postgraduate students were trained and their dissertations on wildlife ecology and land-use successfully supported at MSc level;
- ◆ The overall management of Tarangire National Park and its natural resources was enhanced.

4. Outputs this reporting period

The following reports have been produced during the project life:

- 5,000 copies of a guidebook on butterfly of Tarangire and Lake Manyara Ecosystem were produced;
- 5,000 copies of a plant guidebook to Tarangire National Park were produced;
- 5,000 copies of a guidebook on reptiles and amphibians of Tarangire National Park was produced;
- Topographic and tourism circuit maps were produced by the GIS Centre;
- A scientific report on water quality along Tarangire River was produced.

5. Targets not attained

During the life of the project the following could not be attained:

- Establishment and operationalisation of a Desk Top Publishing Unit at Tanzania
 National Park Headquarters was not yet completed. During a discussion on the issue
 between WWF TPO and TANAPA, it was agreed to that since most work was done
 TANAPA will finalise the completion of the activity by procuring additional
 equipment and setting up a Desk Top Publishing Unit.

6. Lesson learned

- Success in environmental and natural resources conservation initiatives is dependent, among other things, on good, open and dynamic partnership and active participation of stakeholders at all levels;
- Participatory Organisational Capacity Assessment is not only empowering the stakeholders of an organisation but is also key to practical and strategical capacity strengthening for improved performance and institutional sustainability;

• In order for project benefits to be sustainable, a clear exit strategy must be integrated at the design phase and given due attention at all stages of the project.

Acronyms		
•	AOP	Annual Operation Plan (Plan showing activities of all partners)
•	AWF	African Wildlife Foundation
	CA	Co-operation Agreement
•	DOI	Department of Interior (USA)
•	FIDE	Friends In Development
•	GIS	Geographical Information System
	LMNP	Lake Manyara National Park
•	MBK	Mazingira Bora Karatu
•	NHT	National Herbarium of Tanzania
	SRF	systematic reconnaissance flight
	TANAPA	Tanzania National Parks
•	TCP	Tarangire Conservation Program (OIKOS)
	TNP	Tarangire National Park
•	TPO	Tanzania Programme Office (WWF)
	USAID	United States Agency for International Development
•	WWF	World Wildlife Fund

Acknowledgements

The project executant is very grateful for the help and advice of Dr. Herman Mwageni supervises the this project. The project executant is also indebted to Kijja, the Project Administrative Assistant and Martin Loibooki, the Park warden in charge of Tarangire National Park, for help and support during the implementation of this project. The project executant would also like to extend his sincere thanks to Philipp Goeltenboth of WWF US for the technical support accorded to the project. The project executant also feels indebted to the rest of WWF US and WWF TPO staff who in one way or another provided technical and moral support that made project implementation and management a success. Last but not least, the project executant, WWF TPO, WWF US and WWF as an institution would like to sincerely thank the people of the United States of America, USAID as an institution, the USAID Mission in Tanzania, its dedicated staff and especially Daniel Moore for making this project a reality and a success.